

REMARKS

In the final Office Action of June 2, 2005, the Examiner rejected Claim 5 under 35 U.S.C. § 102(e) as being clearly anticipated by Adelman et al. (U.S. Patent No. 6,006,259). The Examiner also rejected Claims 1-5 under 35 U.S.C. § 103(a) as being unpatentable over Adelman et al. in view of Hoke et al. (U.S. Patent No. 6,701,437).

Addressing the rejection of Claim 5 first, applicant submits that at least one limitation of Claim 5 is not fairly shown in the Adelman patent. Specifically, while Adelman provides an excellent description of the environment in which the present invention operates, Adelman does not teach each of the limitations of the specific claimed invention.

Applicant concedes that Adelman teaches an architecture of connecting tunnel clients to tunnel servers over a public network, such as the Internet. Adelman also teaches generalized load balancing amongst the tunnel servers in response to requests from tunnel clients.

However, Claim 5 explicitly requires that for each incoming packet from a tunnel client, an address map in the form of a mapping table is used to determine the routing of the tunnel client packet to the correct tunnel server. Moreover, if a new tunnel client is requesting a connection, then the tunnel designator assigns the new tunnel client to a tunnel server and updates the address map with that information. This process is simply not shown in the Adelman patent. Adelman teaches a different method of processing packets. Specifically, at Col. 9, line 22 et seq. of Adelman, a detailed discussion of how data packets are processed is presented. The tunnel servers and tunnel clients of Adelman are referred to as "clusters" and there are "client clusters" (Col. 9, line 1) and "server clusters".

As detailed in Adelman, there are three different methods of processing data packets. In two of these methods, the data packets are broadcast to all members of a cluster. Each cluster member then applies a filter function (such as a hash) onto every

data packet and then discards all data packets not intended for itself. See Col. 9, line 31-49. In the third method, a "master applies the filtering function to classify the work and forward each packet (if necessary) to the appropriate cluster member." Col. 9, lines 27-29.

Clearly, the broadcasting techniques disclosed in Adelman do not anticipate the "address map" method of the present invention. The broadcasting techniques do not use an address map in any manner. Additionally, the "master implementing filtering" is not the same as using an address map. In the present claimed invention, the address map is a mapping table (database) that associates certain tunnel clients to certain tunnel servers. The filtering described by Adelman does not use a mapping table, but rather relies upon a mathematical hash function. Col. 9, lines 54-59. A filter implemented as a hash function is not equivalent to a mapping table. They do not operate in the same way and likely do not even provide the same result and function.

It is instructive to keep in mind that the tunnel designator of the claimed invention uses a mapping table to maintain a one-to-one correspondence between a tunnel client and a tunnel server. Thus, the tunnel client will be paired with the tunnel server for the entire connection session. In contrast, the system of Adelman utilizes the notion of clusters of servers to serve clusters of clients. There is no one-to-one correspondence and that is why a filter hash function in combination with load balancing is appropriate. For this reason, Claim 5 is patentable over the cited prior art.

Claims 6-8 depend from Claim 5 and are patentable for the same reasons. Claims 1-4 have been canceled and thus the rejection under 35 U.S.C. §103 is moot.

Application No.: 09/732,543

Docket No.: 248588010US1

In view of the above amendment, applicant believes the pending application is in condition for allowance. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0665, under Order No. 248588010US1 from which the undersigned is authorized to draw.

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Respectfully submitted,

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